

REMARKS

The present application includes claims 1-52. Claim 1 was amended as discussed below. Claims 4 and 24 were amended to correct minor typographical errors. Claims 6, 7, 12 and 50 were amended to use the amended term of claim 1. Claim 20 was amended to replace the term "vantage point" which lacks an antecedent with the corresponding term of claim 1. Applicants note that claim 50 is pending in the application. Applicants request that claim 50 be examined together with all the other claims.

Applicants thank the Examiner for the telephone interview conducted with the Examiner on April 28, 2004. In the telephone interview, the meaning of section (e) of claim 1 was discussed together with possible terms to be used in section (e). Applicants also thank the Examiner for indicating claims 6-12, 14-18, 21, 24-27, 31 and 39 as being allowable in independent form.

Figs. 5A and 5B stand rejected by the draftsperson as being unclear. In addition, Fig. 5C was indicated as being missing. Applicants submit herewith clean copies of Figs. 5A, 5B and 5C.

Claims 1-5, 13, 19, 20, 22, 23, 28-30, 32-38, 40-49 and 51-52 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Foley et al., Computer Graphics: Principles and Practice Second Edition in C and for some of the claims another reference. As explained in the telephone interview, applicants respectfully disagree.

For clarity, applicants amended claim 1 to use the term "lighting contribution of a surface", following the language on page 19, line 9, instead of the term boundary visualization value. Applicants note that the scope of the claim does not change due to this amendment, in any substantial manner. Applicants further note that the subject matter of claim 1 is also described in original claim 9 of the application as filed.

In addition, the preamble was amended for clarity to remove the terms "high spatial resolution" and "low spatial resolution", which are not required for understanding the requirements of the claim. If this amendment changes the scope of the claim, it broadens the claim. The last statement of the claim was also amended to remove the terms "high spatial resolution" and "determining", which interfered with the understanding of the claim. If these amendments change the scope of the claim, they broaden the claim.

Claim 1 requires:

(b) accumulating the effect of opacity along a ray path, using opacity values at sampling points, into a ray storage value; and

(e) if the ray is determined to pass between classes, accumulating a lighting contribution of a surface, associated with a boundary between two classes, into the ray storage value.

In Foley, the effect of opacity along a ray path is accumulated into a ray as described on the last paragraph of page 1036. Foley, however, does not teach or suggest accumulating a lighting contribution of a surface, associated with a boundary between two classes, into the ray storage value.

For brevity, the dependent claims are not argued herein. The dependent claims are allowable at least because claim 1 is allowable.

In view of the above remarks, applicants submit that the claims are patentable over the prior art. Allowance of the application is respectfully awaited. If, however, the Examiner is not convinced and the Examiner is of the opinion that a telephone conversation may forward the present application toward allowance, applicants respectfully request that the Examiner call the undersigned at 1 (877) 428-5468. Please note that this is a direct *toll free* number in the US that is answered in the undersigned's Israel office. Israel is 7 hours ahead of Washington.

Respectfully submitted,
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